on page 1, lines 26-28, remove "serial no_____, Attorney docket Number M 8408 US, filed on the same day as the present Application" and insert--U.S. Patent Application Serial No. 09/533,720, filed March 22, 2000--;

on page 2, lines 9-11, remove "serial no_____, Attorney docket Number M- 8409 US, filed on the same day as the present Application" and insert--U.S. Patent Application Serial No. 09/532,921, filed March 22, 2000--;

on page 2, lines 17-19, remove "serial no_____, Attorney docket Number M 8546 US, filed on the same day as the present Application" and insert--U.S. Patent Application Serial No. 09/533,013, filed March 22, 2000--;

IN THE CLAIMS:

Please add new Claims 29-32. Please cancel Claim 18. Please amend Claims 1-28 as follows.

1.   (Amended) A system for searching music, [based upon music content that may be described by a plurality of predetermined feature vectors,] comprising:

[a user interface that can receive a plurality of user requests for searching music, wherein the user requests defines a set of search parameters]

a plurality of feature vectors defining perceived music attributes of a music sample; and

an inferential engine for comparing said plurality of feature vectors of plural music samples to user entered search parameters to generate a playlist for said user.

2.   (Amended) The system of Claim 1, wherein[,] one of said plurality of [the plural] feature vectors comprises [is] an emotional quality vector describing the emotional

reaction to music, based upon whether music is Intense, Happy, Sad, Mellow, Romantic, Heartbreaking, Aggressive, or other emotions.

3.   (Amended) The system of Claim 1, wherein[,] one of said plurality of [the plural] feature vectors comprises [is] a vocal quality vector describing the vocal quality of music, based upon whether music includes a Smooth voice, a Powerful voice, a Great voice, a Soulful voice, or other voice qualities.

4.   (Amended) The system of Claim 1, wherein[,] one of said plurality of [the plural] feature vectors comprises [is] a sound quality vector describing the sound quality of music, based upon whether music includes a Strong beat, or is simple, or has a good groove, or is fast, or is speech like, or emphasizes a melody, or other sound qualities.

5.   (Amended) The system of Claim 1, wherein[,] one of said plurality of [the plural] feature vectors comprises [is] a situational quality vector describing the plural situations for which the music may be used, based on whether the music is, good for a workout, a shopping mall, a dinner party, a dance party, for slow dancing, or for studying or other situations.

6.   (Amended) The system of Claim 1, wherein[,] one of said plurality of [the plural] feature vectors comprises [is] a genre vector describing the music genre, based on whether the music is belongs to a plurality of genres including, Alternative, Blues, Country, Electronic/Dance, Folk, Gospel, Jazz, Latin, New Age, R&B, Soul, Rap, Hip-Hop, Reggae, Rock or others.

7.   (Amended) The system of Claim 1, wherein[,] one of said plurality of [the plural] feature vectors comprises [is] an ensemble vector describing the music ensemble, based on whether the music includes a female solo, male solo, female duet, male duet, mixed duet, female group, male group or instrumental.

8.   (Amended) The system of Claim 1, wherein[,] one of said plurality of [the plural] feature vectors comprises [is] an instrument vector describing the music instruments, based on whether the music includes a includes an acoustic guitar, electric guitar, bass, drums, harmonica, organ, piano, synthesizer, horn, or saxophone or other instruments.

9.   (Amended) The system of Claim 1, further comprising[:] a plurality [feature vector] of input mixers[, that allow a] for allowing said user to dynamically update said search parameters [set a level of a specific feature vector].

10.   (Amended) The system of Claim 9, wherein [the feature vector mixers] said plurality of input mixers comprises input mixers taken from the group consisting of [include] a genre mixer, a voice quality mixer, an emotional quality mixer, an instrument mixer and a sound quality mixer.

11.   (Amended) The system of Claim 1, [9, wherein the feature vector mixers include a voice quality mixer] further comprising a user interface for receiving a plurality of user inputs defining said search parameters.

12.   (Amended) The system of Claim 1, [9, wherein the feature vector mixers include an emotional quality mixer] wherein said plurality of feature vectors are stored in a production database.

13.   (Amended) The system of Claim 1, [9, wherein the feature vector mixers include an instrument mixer] wherein said inferential engine comprises a modeling module for performing a similarity analysis to determine a function for representing the similarity between said plural music samples.

14.   (Amended) The system of Claim 1, [9, wherein the feature vector mixers include a voice quality mixer] wherein each of said plurality of feature vectors are formulated using responses to a plurality of questions asked of a plurality of music listeners after said plurality of music listeners are played a plurality of music samples.

15.   (Amended) A system for searching music based upon music content, comprising:

[that may be described by a plurality of predetermined feature vectors, wherein a user enters search parameters into a user interface that allows a user to vary the plural levels of the plural feature vectors, comprising:]

a user interface [engine] for receiving a [that receives the] user request[s] for [searching] a music playlist, said user request being formulated into a search vector value;

a plurality of feature vectors defining feature vector values corresponding to perceived attributes of music; and

an inferential search engine for generating a playlist of selected music, said music selection being made [based upon] by comparing said plurality of feature vector values to

said search vector value [user chosen feature vector levels, wherein the user interface includes a parser for parsing the user requests].

16.   (Amended) The system of Claim 15, <u>wherein said user interface comprises a</u> <u>parser for parsing the user requests,</u> wherein the parser is a XML parser.

17.   (Amended) The system of Claim 15, wherein the user request[s includes] <u>comprises</u> standard query language (SQL) calls [to the user interface engine].

Please cancel Claim 18.

19.   (Amended) The system of Claim <u>15</u> [1], further comprising:

a modeling module <u>for creating a music space by performing</u> [that performs] a similarity analysis <u>of said feature vector values, wherein said similarity analysis establishes a</u> <u>boundary for said music space, said feature vector values indicating a location for said music</u> <u>within said music space and wherein said comparison of said feature vector values to said</u> <u>search vector value comprises determining the proximity of said music locations to a location</u> <u>within said music space indicated by said search vector value</u> [by comparing feature vectors stored in a production database].

20.   (Amended) A system for creating a [plurality of] music space[s]<u>, comprising:</u> [that allows comparison of music attributes, defined by a plurality of]

<u>a plurality of</u> feature vectors <u>defined by a first set of music attributes allocated to a</u> <u>music piece; and</u> [that are based upon expert data collected from a plurality of expert

music listeners and a plurality of music listeners who respond to a plurality of questions after listening to a plurality of music samples, comprising:]

a modeling module which creates a plurality of music spaces by performing a similarity analysis of said feature vectors, said similarity analysis establishing boundaries for said music spaces [that acquires the expert music listener and music listener responses for defining a plurality of music spaces].

21. (Amended) The system of Claim 20, wherein one of said plurality of feature vectors comprises [the plural music spaces is based upon] an emotional quality vector describing the emotional reaction to music, based upon whether music is Intense, Happy, Sad, Mellow, Romantic, Heartbreaking, Aggressive, or other emotions.

22. (Amended) The system of Claim 20, wherein one of said plurality of feature vectors comprises [the plural music spaces is based upon] a vocal quality vector describing the vocal quality of music, based upon whether music includes a Smooth voice, a Powerful voice, a Great voice, a Soulful voice, or other voice qualities.

23. (Amended) The system of Claim 20, wherein one of said plurality of feature vectors comprises [the plural music spaces is based upon] a sound quality vector describing the sound quality of music, based upon whether music includes a Strong beat, or is simple, or has a good groove, or is fast, or is speech like, or emphasizes a melody, or other sound qualities.

24. (Amended) The system of Claim 20, wherein one of said plurality of feature vectors comprises [the plural music spaces is based upon] a situational quality vector

describing the plural situations for which the music may be used, based on whether the music is, good for a workout, a shopping mall, a dinner party, a dance party, for slow dancing, or for studying or other situations.

25.   (Amended) The system of Claim 20, wherein one of <u>said plurality of feature vectors comprises</u> [the plural music spaces is based upon] a genre vector describing the music genre, based on whether the music is belongs to a plurality of genres including, Alternative, Blues, Country, Electronic/Dance, Folk, Gospel, Jazz, Latin, New Age, R&B, Soul, Rap, Hip-Hop, Reggae, Rock or others.

26.   (Amended) The system of Claim 20, wherein one of <u>said plurality of feature vectors comprises</u> [the plural music spaces is based upon] an ensemble vector describing the music ensemble, based on whether the music includes a female solo, male solo, female duet, male duet, mixed duet, female group, male group or instrumental.

27.   (Amended) The system of Claim 20, wherein one of <u>said plurality of feature vectors comprises</u> [the plural music spaces is based upon] an instrument vector describing the music instruments, based on whether the music includes a includes an acoustic guitar, electric guitar, bass, drums, harmonica, organ, piano, synthesizer, horn, or saxophone or other instruments.

28.   (Amended) The system of Claim <u>20</u> [27], wherein <u>said plurality of music spaces are combined to define</u> [on of the plural music spaces is] a combined music space [that may include a plural combination of the emotional quality vector, vocal quality

vector, sound quality vector, ensemble quality vector, genre vector, instrument vector, or situational vector].

Please add new Claims 29-32.

--29. (New) The system of Claim 28, wherein said plurality of feature vectors comprises at least two feature vectors taken from the group consisting of an emotional quality vector, a vocal quality vector, a sound quality vector, an ensemble quality vector, a genre vector, an instrument vector, and a situational vector, wherein said combined music space comprises music spaces corresponding to said at least two feature vectors.

30. (New) The system of Claim 28, wherein said music piece is assigned a first location in said combined music space proximate to a second locations assigned to a second music piece having a second plurality of feature vectors defined by similar by a second set of music attributes similar to said first set, said first and said second locations forming a cluster.

31. (New) The system of Claim 20, wherein said plurality of feature vectors are each formulated using responses to a plurality of questions asked of a plurality of music listeners after said plurality of music listeners are played a plurality of music samples.

32. (New) The system of Claim 1, further comprising a music space, wherein each of said feature vectors provides a location for said plural music samples within said music space, said inferential engine comparing said plurality of feature vectors using said locations. --